

We claim:

1. A method for inspecting ophthalmic parts comprising colorants the method comprising the steps of:

- 5           a) capturing an image of said ophthalmic part comprising at least one colorant wherein said image comprises an array of pixels and said at least one colorant is present in a portion of said image;
- b) locating a reference means in said image of said ophthalmic part and finding the center of said reference means;
- 10          c) locating at least one first pixel area in the portion of said image of said ophthalmic part comprising said at least one colorant;
- d) comparing the location of said at least one first pixel area to the location of a first pixel standard to determine the location of said colorant center; and
- 15           comparing the location of the center of said reference means to the location of said colorant center to determine if said at least one colorant is properly located on said ophthalmic part.

2. The method of claim 1 wherein the reference means is the knife edge.

- 20          3. The method of claim 1 wherein the reference means is the outside edge.

- 25          4. The method of claim 1 wherein the first pixel area is located in the iris pattern and first pixel area comprises 10 x 10 pixels.

5. The method of claim 4 wherein the first pixel area comprises at least 5 x 5 pixels.

- 30          6. The method of claim 1 further comprising the step of
- e) comparing a second pixel standard to at least one second pixel area in the portion of said image of said ophthalmic part comprising a colorant to determine the location of the colorant center.

7. · The method of claim 1 wherein all steps are automated and occur in an on-line manufacturing line.

8. · The method of claim 1 further comprising the step of  
5           e) rejecting all ophthalmic parts wherein the difference between the location of the center of said reference and the location of the center of said colorant center are greater than about 0.550 mm.

9. · The method of claim 7 further comprising the step of  
10          e) rejecting all ophthalmic parts wherein the difference between the location of the center of said reference and the location of the center of said colorant center are greater than about 0.550 mm.

10. · A method for inspecting ophthalmic parts comprising colorants the  
15 method comprising the steps of:  
            a) capturing an image of said ophthalmic part comprising at least one colorant wherein said image comprises an array of pixels and said at least one colorant is present in a portion of said image;  
            b) locating a reference means in said image of said ophthalmic part  
20          and finding the center of said reference means;  
            c) analyzing said portion of said image comprising at least one colorant to determine the dimension of said portion and finding the colorant center of said image;  
            d) comparing the location of the center of said reference means to  
25          said colorant center to determine if said at least one colorant is properly located on said ophthalmic part.

11. · The method of claim 10, further comprising the step of e) rejecting all ophthalmic parts wherein the difference between the location of the center of  
30          said reference and the location of the center of said colorant center are greater than about 0.550 mm.

12. The method of claim 10 wherein all steps are automated and occur in an on-line manufacturing line.

13. A method for inspecting ophthalmic parts comprising colorants the  
5 method comprising of the steps of:  
a) capturing an image of said ophthalmic part having at least one colorant wherein said image comprises an array of pixels and said at least one colorant is present in a portion of said image;  
b) capturing a reference image of a standard ophthalmic part  
10 wherein said reference image comprises an array of pixels and said at least one colorant is present in a portion of said reference image;  
c) comparing the intensities of the image from step a) with the reference image from step b) to determine whether the image from step a) contains defects.  
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14. The method of claim 13 further comprising the step of  
e) rejecting all ophthalmic parts having excess colorant in the optical zone having an area of greater than about  $0.06 \text{ mm}^2$ .

20 15. The method of claim 13 further comprising the step of  
e) rejecting all ophthalmic parts having voids of colorant in the iris pattern, wherein said voids have a total area of great than about  $2.0 \text{ mm}^2$ .

25 16. The method of claim 13, wherein all of the steps are automated and occur in an on-line manufacturing line.

17. The method of claim 13, further comprising the steps of  
e) locating a reference means in said image of said ophthalmic part and finding the center of said reference means;  
f) locating at least one first pixel area in the portion of said image of said ophthalmic part comprising said at least one colorant;  
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g) comparing the location of said at least one first pixel area to the location of a first pixel standard to determine the location of said colorant center; and

5                 comparing the location of the center of said reference means to the location of said colorant center to determine if said at least one colorant is properly located on said ophthalmic part.

18. The method of claim 17, further comprising the step of

10                 h) rejecting all ophthalmic parts wherein the difference between the location of the center of said reference and the location of the center of said colorant center are greater than about 0.550 mm.

19. The method of claim 17, further comprising the step of

15                 h) rejecting all ophthalmic parts having excess colorant in the optical zone having an area of greater than about 0.06 mm<sup>2</sup> or having voids of colorant in the iris pattern, wherein said voids have a total area of great than about 2.0 mm<sup>2</sup>.